

Page 60, line 24, after "IMC129", please insert --(SEQ ID NO:3)--. At line 25, after "Westar", please insert --(SEQ ID NO:1)--.

In the Claims:

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1. (Amended) An isolated nucleic acid fragment comprising a sequence of at least about 20 nucleotides from a *Brassicaceae* or *Helianthus* delta-12 fatty acid desaturase gene having at least one mutation, wherein said at least one mutation is effective for [increasing levels of oleic acid] altering the fatty acid composition in *Brassicaceae* or *Helianthus* seeds and wherein said sequence includes said at least one mutation.

27. (Amended) An isolated nucleic acid fragment comprising a sequence of at least about 20 nucleotides from a *Brassicaceae* or *Helianthus* delta-15 fatty acid desaturase gene having at least one mutation, wherein said at least one mutation is effective for [increasing levels of oleic acid] altering fatty acid composition in *Brassicaceae* or *Helianthus* seeds and wherein said sequence includes said at least one mutation.

55. (Amended) A method for producing a *Brassicaceae* or *Helianthus* plant line, comprising the steps of:

- 11  
a) inducing mutagenesis in cells of a starting variety of a *Brassicaceae* or *Helianthus* species;  
b) obtaining one or more progeny plants from said cells;

c) identifying at least one of said progeny plants that contains a delta-12 fatty acid desaturase gene having at least one mutation, said at least one mutation in a region encoding a His-Xaa-Xaa-Xaa-His amino acid motif; and

[e)]d) producing said plant line from said at least one progeny plant by self- or cross-pollination, said plant line having said at least one delta-12 gene mutation [for at least three additional generations].

57. (Amended) The method of claim 55, further comprising the steps of:

[f)]e) inducing mutagenesis in cells of said plant line;

[h)]f) obtaining one or more progeny plants from said plant line cells;

[d)]g) identifying at least one of said plant line progeny plants that contains a delta-15 fatty acid desaturase gene having at least one [delta-15 gene] mutation, said at least one delta-15 gene mutation in a region encoding a His-Xaa-Xaa-Xaa-His amino acid motif; and

[e)]h) producing a second plant line from said at least one plant line progeny plant by self- or cross-pollination, said second plant line having said at least one delta-12 gene mutation and said at least one

delta-15 gene mutation [for at least three additional generations].

62. (Amended) The method of claim [58] ~~59~~, further comprising the steps of:

[f)]e) inducing mutagenesis in cells of said plant line;

[h)]f) obtaining one or more progeny plants from said plant line cells;

[d)]g) identifying at least one of said plant line progeny plants that contains a second delta-12 fatty acid desaturase gene having at least one mutation, said second gene mutation in a region other than a region encoding a His-Xaa-Xaa-Xaa-His amino acid motif; and

[e)]h) producing a second plant line from said at least one plant line progeny plant by self- or cross-pollination, said second plant line having said first and second delta-12 gene mutations [for at least three additional generations].

64. (Amended) A method for producing a *Brassicaceae* or *Helianthus* plant line, comprising the steps of:

a) inducing mutagenesis in cells of a starting variety of a *Brassicaceae* or *Helianthus* species;

b) obtaining one or more progeny plants from said cells;